

## **Committee on Resources, Subcommittee on Energy & Mineral Resources**

[energy](#) - - Rep. Barbara Cubin, Chairman

U.S. House of Representatives, Washington, D.C. 20515-6208 - - (202) 225-9297

## **Subcommittee on Forests & Forest Health**

[forests](#) - - Rep. Scott McInnis, Chairman

U.S. House of Representatives, Washington, D.C. 20515-6205 - - (202) 225-0691

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### **Witness Statement**

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#### **"Energy Impacts of the Roadless Rule"**

**Statement of  
Greg Schaefer  
Director, External Affairs, Arch Coal Company  
on Behalf of**

**The National Mining Association  
and the  
Colorado, Utah and Wyoming Mining Associations  
Before the  
Energy and Mineral Resources Subcommittee  
and  
the Forests and Forest Health Subcommittee  
of the  
House Resources Committee  
April 4, 2001**

Good afternoon and thank you for the opportunity to speak to you today regarding the Roadless Area Final Rule. My name is Greg Schaefer and I am Director External Affairs Western Operations for Arch Coal, Inc. I am also here on behalf of the National Mining Association (NMA) as well as the Colorado, Utah and Wyoming Mining Associations. As background, Arch Coal is the second largest coal producer in the nation, producing about 112 million tons of high quality coal annually. We serve 149 power plants in 30 states. We currently have six operating coal mines in the western United States, four of which operate at least partially on National Forest Service lands.

At the outset let me say that the Forest Service, throughout the rulemaking process, stated the rule was not designed to prohibit mining, it would only prohibit the construction and reconstruction of roads. In fact the preamble to the rule states that "[m]ineral leasing activities not dependent on road construction such as "underground development, would not be affected by the prohibition." This proposition was refuted in the record by a Department of Energy report ("Impact of the Roadless Initiative on Coal Resources" Bill Hochheiser, November 30, 2000) which provided, "[w]hile these resources are recovered using underground mines, roads are needed to build ventilation shafts and for safety." Simply put, one must have roads for mineral exploration and development. This point was clearly made in the rulemaking record and obviously ignored by the rule's authors.

## **Impacts on Energy Resources**

The Forest Service has a stated policy regarding minerals on Forest Service Lands which states:

"The Federal Government's policy for minerals resource management is expressed in the Mining and Minerals Policy Act of 1970 - '...foster and encourage private enterprise in the development of economically sound and stable industries, and in the orderly and economic development of domestic resources to help assure satisfaction of industrial, security, and environmental needs.' Within this context, the national forests and grasslands have an essential role in contributing to an adequate and stable supply of mineral and energy resources while continuing to sustain the land's productivity for other uses and its capability to support biodiversity goals."

This policy is as important today as it was on the day it was written. Coal and mineral resources from Forest Service lands are vital to supplying electricity at a reasonable price and in an environmentally sound manner. The mineral policy also states that the Forest Service "require reclamation plans for all surface-disturbing activities to return the land to productive uses consistent with the ecological capability of the area and in accordance with land management goals." This policy is consistent with state and federal laws and regulations governing coal mining activities.

As I will describe in more depth later in this testimony, the Forest Service proposed and promulgated the Roadless Area Conservation Rule without sufficient information to perform an adequate analysis of the rule's impact on coal production from Forest Service lands. Only after the abbreviated 60-comment period closed did it become clear what areas would be affected and to what degree. When this information became available to the Forest Service, it was glossed over or completely ignored in the Final Environmental Impact Statement (FEIS), the final rule and its preamble.

Due to the lack of detailed information, the Forest Service significantly underestimated the rule's impact on energy supplies in the western United States. The preamble to the final rule shows the effort to which the Department has gone to try and minimize the impact of the rule. Faced with the additional information that we provided, the Forest Service concluded:

"Moreover, it seems likely that even if resources do underlie inventoried roadless areas, they would be among the last areas entered for exploration and development...the agency has determined that the information does not materially alter the environmental analysis disclosed in the FEIS and does not constitute significant new circumstances or information relevant to environmental concerns bearing on the rulemaking effort."

The fallacy of this statement can be seen on the attached maps. The additional coal resources needed to keep the West Elk Mine alive would be among the first areas entered for exploration and development -- not among the last.

The Department also downplayed the significance of National Forest Service lands as a source of high quality, low sulfur coal. In the preamble to the final rule they stated:

"The FEIS described the coal production from NFS lands as accounting for about 7% of national production in 1999."

This statement implies that tightening up access simply will not have much impact on energy production

from National Forest Service lands. However, last year our Black Thunder Mine in Wyoming alone produced over 60 million tons of coal, which represents over 5% of national production by itself. The Black Thunder Mine is located in the Powder River Basin of Wyoming and is located on the Thunder Basin National Grasslands which is managed by the National Forest Service. In speaking with Forest Service personnel, it was learned that they do not have a good method of estimating coal production from National Forest Service lands. A quick survey of some of producers on the Thunder Basin National Grasslands revealed that these few mines in Wyoming accounted for 8-10% of national coal production. This completely ignores coal production from National Forest Service lands in Colorado and Utah. If accurate data were used, the percentage of national coal production from National Forest Service Lands could very likely be 15-20%, which is a very significant percentage.

In the justification for limiting access to high quality coal reserves on National Forest Service lands, which ultimately leads to phasing out the existing mining operations, the Department concluded:

"Overall, the U.S. has abundant coal reserves. Also, alternative sources of low-sulfur coal do exist, concentrated in the western U.S., mostly in Colorado, Montana and Wyoming. Additionally, the abundant sources of low cost-coal and available technology, such as scrubbers, will enable electric utilities to meet their Clean Air Act compliance goals."

This statement writes off significant sources of high quality compliance coal in Utah and parts of Colorado and creates major problems for the generators of electricity in Utah. The premise for this statement is simply incorrect, and will be discussed below.

### Colorado Impacts

The State of Colorado produces close to 30 million tons of high quality bituminous coal annually. Roughly 45% of this coal is used within the state and the remainder is exported to other states. The North Fork Valley near Paonia, Colorado (roughly 90 miles east of Grand Junction, Colorado) produces approximately 60% of the total volume of Colorado coal, and is the fastest growing coal-producing region in Colorado. This area consists of three underground coal mines: Arch's West Elk Mine, the Oxbow Mine and Bowie Resources. It is anticipated that these three mines will produce up to 16 million tons of coal in 2001 with about 700 employees and an annual payroll of \$50 million.

In 1999, coal from these three mines was shipped to power plants in Colorado, Kentucky, Illinois, Wisconsin, Michigan, Oregon, Minnesota, Missouri, Texas, Iowa, and Utah. The Utah power plant supplied by this coal was the Intermountain Power Project (IPP) which is owned by the City of Los Angeles and provides low cost reliable power to California.

The Department of Energy report referenced above highlights some of the energy impacts created by the roadless rule:

"This coal is highly valued by these utilities because of its low sulfur content (0.5%) and high Btu value. Utilities such as Tennessee Valley Authority rely on this coal as their Clean Air Act compliance strategy. The utilities blend this coal with other, higher sulfur, lower Btu coal to achieve compliance, and burn the Colorado coal exclusively during time of high demand in order to avoid derating of their plants while staying under air emissions limits."

The Department of Energy report also describes specific energy impacts in the North Fork Valley:

"The West Elk Mine requires access in the next one to five years to three areas of high quality coal resources that lie partially or entirely under roadless areas. Approximately 200 million tons of high quality coal would be put off limits and the mine would be forced to close prematurely. In addition, as much as 50 million tons of coal on the existing lease would likely not be mined because planned longwall panels that would extend into unleased federal coal would not proceed. As a result, the \$100 million of infrastructure already invested in this mine would be abandoned.

The West Elk Mine produces seven million tons of coal per year, providing \$26 million dollars per year of direct labor income and almost \$90 million of direct plus indirect income. The potentially unminable 200 million tons of coal have a value of \$3 billion. Using the multiplier of 3.5, as used in the FEIS (p.3-316, table 3-68), this represents a total of over \$10 billion in foregone economic activity.

The Bowie mine, northwest of the West Elk mine, is hemmed in on the north and west by roadless areas. These are the logical directions of expansion for this mine. This mine produces five million tons of high Btu/low sulfur coal and employs 178 people at the mine, with an annual payroll of \$9 million per year. This translates to more than \$30 million per year of direct plus indirect economic impact

The mining company estimates that the roadless rule would put 50 million tons of high quality coal off limits to the Bowie mine, coal with a value of \$750 million. Using the multiplier from the previous bullet, this translates to over \$2.5 billion of economic activity."

### Utah Impacts

In Uinta coal region of Utah, the Forest Service concentrated on only three tracts: the Muddy, Ferron, and North Horn tracts. These tracts are either next to an existing mine or contain sufficient high quality reserves to support a new mine. The FEIS that preceded the final roadless rule estimates these three tracts contain 185 million tons of high-Btu coal. This coal would have a value of over \$2.8 billion to \$3.7 billion if mined.

While these three tracts represent a sizable amount of coal, they also represent only the tip of the iceberg as shown on the attached map of the Uinta region. The roadless areas block mine development and expansion across the entire western boundary of the region. None of this information regarding resource information outside of the three tracts was considered by the rule writers nor the authors of the FEIS.

The primary impact of the roadless area rule in Utah will be on the Manti-LaSal National Forest. The map shows that a significant portion of Utah's coal industry is located in the Manti-LaSal National Forest and is either overlain or adjacent to the roadless area boundary. The State of Utah annually produces roughly 25 to 27 million tons of high quality, low sulfur coal, half of which is used in the State of Utah. Just under 50% of the coal is exported to states such as Nevada, California, Oregon, Illinois, Missouri, Kentucky, Idaho, Colorado, Washington, Wyoming and Tennessee for electric generation (about 26%) and other industrial/commercial/residential uses (%16). Depending on the exchange rate and the demand for steam and metallurgical coal about 10% of Utah coal is exported to Pacific Rim countries through the Los Angeles Export Terminal.

The existing coal mines that are overlain by or adjacent to the Roadless Areas are the SUFCO, Deer Creek,

Trail Mountain, Crandell and Star Point mines. In 1999 these mines represented almost 70% of the coal production in the State of Utah.

The State of Utah is unique among coal producing states in that it does not have an extensively developed rail system for many of the mining operations and coal-fired power plants. This means that in many instances the Utah power plants are much more reliant on local sources of coal than counterparts in other states. For example, the Huntington Power Plant has no rail service and must rely on local mines to supply coal by truck. This plant is planning a significant expansion to meet energy demand needs for the State of Utah, as well as for export to other western states (e.g., California).

The City of Los Angeles owns the Intermountain Power Project (IPP), with the power generated by this plant being exported to California. As a part of the current energy crisis in California, the IPP plant is also considering a significant expansion. The vast majority of the coal used at this plant is from the State of Utah.

The potential power plant expansions in Utah could add as much as a 40% increase in in-state demand for Utah coal. This is at a time when the number of coal mines in Utah have been decreasing and significant uncertainty has been added due to the roadless rule. A complicating factor in the State of Utah is the settlement agreement between the state and the federal government over the lost coal resources as a result of the designation of the Grand Staircase Escalante National Monument. In this settlement agreement, the federal government transferred temporary ownership of some coal reserves to the State of Utah (SITLA). The final rule states that these tracts have valid existing rights and can be mined. However, after the tracts, a certain amount of coal has been produced from these tracts, they revert back to the federal government. Furthermore, some of these tracts will need adjacent coal in order to justify the capital needed to build a mine. Where that adjacent federal coal is encumbered by the roadless area prohibitions, the likelihood of one investing capital in these mines is diminished.

### California

This section briefly discusses the role of coal in the State of California. This State was chosen since it is currently in the middle of a critical energy crisis and has generated a great deal of attention. Currently, the State of California is meeting 75% of its electric needs by in-state generation and is importing the remaining 25% from other western states. There are no major coal-fired power plants in the State of California, but coal-fired-generated electricity still accounts for 20% of their total energy mix<sup>(1)</sup>. Some of these sources include the Intermountain Power Project in Utah (Utah coal); Reid-Gardner Unit 4 in Nevada (Utah and Colorado coals); Deseret G&T in Utah (Utah and Colorado coals); Boardman Plant in Oregon (Utah, Colorado and Wyoming coals). Each of these sources receives a portion of its coal from mines underlying areas affected by the roadless rule. The State of California also has various "northwest contracts" from various sources including Pacificorp in Utah, which is supplied by Utah coal and similarly affected by the rule. As can be seen, the Utah and Colorado coal industries are an integral and critical part of not only the Utah and Colorado electric supply but also the State of California as well.

### Summary

The Nation must use our vast domestic resources to meet the growing energy requirements that an expanding economy requires. Many of these resources, including coal, are found on lands administered by the Forest Service and on other public lands. Demand for coal for affordable, reliable electricity is expected to increase by over 25% during the next 20 years. Nearly 90% of this additional coal production will come

from public lands in the West; much from Forest Service administered lands impacted by this rule. If this affordable coal is not available, high costs for alternative fuels will mean higher electricity costs and lower electricity reliability. Also, the coal industry will continue to be required to reclaim any surface disturbance to at least as good a condition as the premining landscape.

### The Roadless Area Initiative Process.

I have been involved in the Roadless Area proceedings since President Clinton announced the initiative on October 13, 1999. I attended several public scoping meetings, including one in Grand Junction, Colorado in December, 1999 and subsequently requested an extension of time of the scoping period. In our letter, dated December 17, 1999, requesting an extension of time we made several requests that have never been adequately addressed in this process

"It is difficult, if not impossible, to provide knowledgeable comments on the proposal when the Forest Service has not provided the public with sufficient detail. For example, the Forest Service has not provided maps with any level of detail to be able to develop questions or comments relative to our operations. Just prior to writing this letter, I went to the Forest Service website dedicated to the Roadless Area initiative and it still states that the maps are 'Under Development'. In Colorado, a public hearing was held in Grand Junction, Colorado. Once again, the Forest Service provided maps, but in this case they were 'conceptual', and lacked any meaningful detail. We have asked for detailed maps, that included coordinates, townships, ranges, and sections, but have been unable to acquire the requested information. Local Forest Service personnel have tried to help, but they have warned us that even when the maps are available, they may not be accurate? At a minimum, the Forest Service should provide the following so that meaningful comment can be submitted:

"Detailed maps showing the location of the proposed roadless areas, with coordinates, sections, townships and ranges. Identify the coal reserves that are located within the proposed roadless areas, as well as quantify the coal quality of those reserves. Identify the location of existing mining operations that could access these reserves, and provide an analysis of the socio-economic consequences of the inability to obtain additional reserves. If there are no nearby mining operations, assess the impact on the loss of those coal reserves from the reserve pool."

The Forest Service never addressed this request. Subsequently, maps were posted on the website after the close of the public comment period, but the scale and lack of legal description made them virtually useless for assessing local impacts, but did give us a sense that we should look very closely at our Colorado operation in particular. The same information was requested by the NMA through a Freedom of Information Act (FOIA) request during the comment period for the proposed rule. After the close of the comment period, NMA was told in a formal response from the Forest Service that, in short, the maps and the relationship between roadless areas and mineral reserves were available on the Forest Service web site. Anyone who saw the information on the Forest Service web site knows this statement is just plain wrong.

Fearing that we would not have any data in which to assess the boundary of the Roadless Area relative to our West Elk Mine in Colorado, we set out on a mission to try and develop our own map(s). Working with a local Forest Service employee we dug up the RARE II boundary that was proposed in 1979 and plotted that information on our mine plan map. It was found that the boundary passed right over the top of the West Elk Mine and contained nearly all future reserves accessible by this underground mine. As it turned out, the 1979 RARE II boundaries were used in setting the boundaries of the Roadless Area without any further review of any changes over the 20-year period. Of particular interest is that this boundary encompasses

lands that contain a significant number of existing roads.

Once this map was developed, we met with the Regional Forester's Office in Denver, Colorado in early February 2000. Their response was that they were pleased to have a map with this level of details, as they had not been provided with any detailed information from the Washington, D.C. Office of the Forest Service. The Regional Office acknowledged the problem and asked what relief we were seeking. Our response was that since the West Elk Mine was on the margin (edge) of the proposed Roadless Area that we would like the boundary slightly modified in order to provide a future for the West Elk Mine. The reply was that there was not an opportunity to move the boundaries as that decision had already been made.

Even though the public comment period had closed, we provided the map that we had developed to the national Forest Service Team working on the Roadless Area Environmental Impact Statement. One member of the team reiterated that there was no opportunity to move the boundary as that decision had already been made. Our question was how could that be if the Draft Environmental Impact Statement was only now being prepared?

All of our efforts during this period were reflected in one small paragraph of the DEIS, which stated:

"[The prohibition of road construction] could increase exploration and development costs for leaseable minerals so that deposits in inventoried roadless areas may be less economically feasible for development. For example, one Colorado coal company has submitted information showing that the opportunity to access coal resources adjacent to their existing leases would be severely limited by a prohibition on road construction."

Leadership in the Forest Service either did not have adequate information or chose to ignore it. The problem remained that there was a lack of detailed map information. Arch Coal commissioned a consultant to develop the location of existing, and in some instances prospective coal leases, on the Grand Mesa, Uncompaghre and Gunnison (GMUG) National Forest in Colorado. Significant resources were put into developing this map, but the most difficult aspect was obtaining the legal descriptions of the proposed roadless areas.

During the development of these maps, we continued to meet with the minerals branch of the Forest Service, the Department of Energy, Office of Management and Budget, Council on Environmental Quality, among others. A scheduled meeting with Forest Service Chief Mike Dombeck was "delegated" as the Director and other senior members of the Forest Service canceled the meeting to lower level staff at the last moment.

During one meeting with the Department of Energy we were shown a Roadless Area delineation map supplied to them by the Forest Service that showed several areas of significant impact to the coal industry on the Manti-LaSal National Forest in Utah. This information was stunning for two reasons: first, the Forest Service had never made this information public; and second, our company had been told several times by local forest service officials that there was no impact to our underground coal mining operations in Utah. Unfortunately, we took that declaration at face value.

Upon the revelation that the issue extended beyond our Colorado operations, we also commissioned the consultant to perform the same mapping exercise for the Manti-LaSal National Forest in Utah. The Colorado and Utah maps were finally completed right about the time the Final Environmental Impact Statement was issued, and are attached and incorporated in this testimony. Although the final rule can be

published as soon as 30 days following publication of the FEIS, the message these maps conveyed manifested a significant impact the Forest Service failed to project and the message was conveyed to the Department of Energy, the Office of Management and Budget, the Council on Environmental Quality and the Forest Service.

Notwithstanding this compelling information, the preamble to the final rule states:

"The Department has decided not to adopt the exception for future discretionary mineral leasing because of the potentially significant environmental impact that road construction could cause to inventoried roadless areas"

This is clearly an excuse and not a valid reason. State and federal mining regulations require that all surface disturbances associated with the mining operation must be reclaimed to a condition at least as good as the pre-mining condition. This means that any roads developed in conjunction with the mine, including exploration, development or operation must be reclaimed. Further, state and federal mining regulations require that the quality of surface and ground water must be protected.

In a further effort to convince the public that these lands need to be off-limits for future mineral development the preamble states that if road construction and reconstruction were allowed for future energy and mineral leasing, an additional 59 miles of road over a five-year period would be built in roadless areas (including oil, gas and non-fuel minerals). The preamble further states that at this rate, 10 million acres would be affected, which is interesting considering that the Department only identified 8 million acres that have the potential for oil and natural gas (of which 2.5 million acres have potential for coal and coal bed methane). Again, the Forest Service has conveniently ignored the fact that roads developed in conjunction with mining must be fully reclaimed to a condition at least as good as the pre-mining condition.

#### Protections for Roadless Values Already Exist

The Forest Service chose to accept these severe proscriptions for roadless areas even though roads associated with coal mines are temporary and the Surface Mining Control and Reclamation Act (SMCRA) mandates that these roaded areas be reclaimed to a condition as good or better than they were before mining. Furthermore, surface coal mines cannot be permitted at all on Forest Service lands unless the Secretary of Interior "finds that there are no significant recreational, timber, economic or other values which may be incompatible with surface mining operations..." (Section 522(e)(2)) In other words, the values the rule is intended to safeguard have already been considered and protected by an existing statute.

During the rulemaking process, the Forest Service also ignored the fact that the SMCRA provides the exclusive statutory scheme for designating areas unsuitable for coal mining. The first question the authors of this rule should have asked was whether the agency has the authority to deny reasonable access to federal coal.

#### Other Mineral Related Impacts of the Roadless Area Conservation Rule

Stillwater Mining Company produces platinum and palladium from its mine located partially on Forest Service lands in Montana. Two of the roadless conservation areas cover portions of these reserves, which represent the only operating platinum/palladium mine in the Western Hemisphere. Even though Congress specifically drew the boundaries of the Absaroka-Beartooth Wilderness to exclude these important deposits, the roadless rule ignores this obvious congressional intent.



Platinum and palladium are critical elements in catalytic converters as well as components in high temperature and corrosion resistant alloys used in jet aircraft and other defense applications. The environmental, economic and national security implications of denying access to develop these unique and important deposits are significant.

Like coal underlying Forest Service lands, holders of federal phosphate leases will be limited in their ability to expand production levels beyond the boundaries of existing leases. The FEIS states that 873.3 million tons of phosphates not yet leased could be affected by the roadless rule and ideational amounts could be affected when land management plans are revised or amended. The cumulative impact of the increased energy costs and the escalated cost of fertilizer on western farmers and ranchers will be profound.

### Conclusion

The Final Roadless Area Conservation Rule will clearly result in the loss of millions of tons of coal and phosphates, as well as substantial quantities of metallic and other hardrock minerals, that could otherwise be recovered from Forest Service administered lands. The economic impact on energy, agriculture and mining sectors is hundreds of millions of dollars. The cost/benefit analysis appears to under-estimate grossly the impact, and the Forest Service has ignored the cumulative effect the rule will have on sectors of the economy already reeling because of elevated energy costs.

In its evaluation of the adequacy of the regulatory framework for hard rock mining, the National Research Council stated:

The lack of information appeared to be greatest among highly placed officials who have the greatest need to know. Consequently, those responsible for regulatory management and change, and for keeping the public and Congress adequately informed, appear to be severely limited in their ability to do so. [\(2\)](#)

Although this observation was made in a different regulatory context, it is clearly applicable to the situation at hand.

The authors of the rule went to great pains first to dismiss then, when confronted, understate the impacts this rule will have on the Nation's ability to meet its energy needs. The agency completely ignored the existing regulatory scheme, including the Clean Water Act, the Endangered Species Act, the Surface Mining Control and Reclamation Act, and most notably the Wilderness Act, that protects the values this rule claims to defend. The price the entire Country will pay of this failure has already been witnessed in California and is spreading across the West.

1. Source: 1999 Net System Power Calculation, Electricity Analysis Office, California Energy Commission , April 2000

2. *Hardrock Mining on Federal Lands*, National Research Council (September, 1999)